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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,473	01/09/2002	W. Alan Burris		6088

37211 7590 02/28/2005

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PENFIELD, NY 14526

EXAMINER

TRAN, THAO T

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,473

Applicant(s)

BURRIS ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-24 and 26-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8, 10-24 and 26-32 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/9/2005 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-8, 10-24, 26-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 contains the newly added limitation, "non-pressurized liquid reservoir", which was not disclosed in the specification as originally presented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7, 10-24, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burris (US Pat. 5,213,773) in view of Burris (US Pat. 5,207,993).

Burris '773 teaches a liquid treatment system 10, comprising an untreated liquid source 11, a corona discharge ozone generator 20, a gas check valve 22, a liquid check valve 16, a venturi 21 or pump 25 (static mixer), for conducting the ozone-containing gas and the untreated liquid to the venturi or the pump, a control system 12, an outlet for liquid containing ozone to pass through filter 31; wherein the ozone-containing gas is mixed with the untreated liquid before the liquid is output (see abstract; Figures 1-5). Note: the examiner is treating the gas valve 22 and the venturi 21 or pump 25 would constitute a gas pumping system and the liquid valve 16 and the venturi 21 or pump 25 would constitute a liquid pumping system.

Burris '733 further teaches the pump means or venturi to combine and mix the ozone-containing gas and the untreated liquid and delivers the mixture to a contact chamber 18 via an inline mixer 19 (see col. 3, ln. 13-25). The reference teaches vent 26 to vent excess ozone out of the chamber 18, an ozone reducer 28 the concentration of any ozone escaping to the atmosphere (see col. 3, ln. 28-34).

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Burris '773 further teaches pump 25 or 35 a positive pressure liquid pump that can withdraw the untreated liquid from source 11 or excess ozonated liquid from chamber 18 and mix the liquid with the ozone-containing gas (see Fig. 1-2; paragraph bridging col. 4-5).

Burris '773 further teaches a manually demand switch connected to a control system and an outlet for controlling the flow of the delivery system (see Fig. 4).

Burris '773 does not teach the reservoir to be non-pressurized. Burris '993 teaches the use of a non-pressurized reservoir 11 (see Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed a non-pressurized reservoir, as taught by Burris '993, in the apparatus of Burris '773, and would have given the same results. This is because it has been within the skill in the art that these reservoirs have been used as alternatives of each other and substituting one for another would have given the same results, as disclosed in the instant specification.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burris '773 and Burris '993 as applied to claim 1 above, and further in view of Burris (US Pat. 5,422,043) or Burris (US Pat. 5,858,283).

Burris '773 and Burris '993 are as set forth in claim 1 above and incorporated herein.

The Burris '773 combination does not teach the use of a diffuser to disperse the ozone-containing gas into the liquid.

Burris '043 or Burris '283 teaches the use of a diffuser for dispersing gas bubbles into a liquid (see abstract).

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used a gas diffuser, as taught in Burris '043 or Burris '283, into the apparatus of Burris '773, for enhancing the dispersal of the ozone-containing gas into the liquid.

Response to Arguments

7. Applicant's arguments with respect to claims 1-7 and 10-32 have been considered but are moot in view of the new ground(s) of rejection.

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Burris '043 and '283 are used to illustrate that a diffuser has been used previously to disperse the ozone-containing gas into the liquid, and therefore remedy the Burris '773 combination.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 25, 2005

Thao Tran
THAO T. TRAN
PATENT EXAMINER